

Study of High-Molecular Organosilicon Compounds
by the Methods of Infrared Spectroscopy, by
A. P. Kreshkov, Yu. Ya. Mikhaylenko, Ye. A.
Kirichenko; 15 p.

RUSSIAN, per, Zhur Fiz Khimii, 1957, Vol XXXI,
No 12, pp 2690-2696.

SLA 59-17093

Sci
Jun 60
Vol 2, No 8

~~105,550~~
105,550

Some Characteristics of Oxygen Depolarisation
Processes, by A. I. Krasil'shchikov.

RUSSIAN, per, Zhur Fiz Khimii, Vol. XXXI, No 12,
§ 1957, pp 2706-2710.

CSIRO

Sci - Chem
Oct 61

171, 375

Lyzlov, Yu. V., Mechkovskaya, T. A., and Smartsev, A. G.
THE INFLUENCE OF GELATIN ON THE FORMATION OF ELECTROLYTIC DEPOSITS OF COPPER
(Vlyantye Zhetatiny na Obrazovaniye Elektrolyticheskikh Osadkov Mest). Sep 61 [11]p. 18 refs. RDS 1854
Order from OTS or SLA \$1.60 61-28161

Trans. of Zhurnal Fizicheskoi Khimii (USSR) 1957,
v. 31, no. 4-2 pp. 2520-2724.

DESCRIPTORS: *Copper, *Deposits, *Electrolytic cells, *Cathodes (Electrolytic cell), *Gelatin, Electrolysis

With the aid of a microscope the surface of a micro-cathode was observed during the deposition of copper from an acid copper bath which contained gelatin as a brightener. The existence of a critical current density (Chemistry-Physical, TF, v. 6, no. 12) (over)

61-28161

- I. Lyzlov, Yu. V.
- II. Mechkovskaya, T. A.
- III. Smartsev, A. G.
- IV. RDS-1854
- V. Department of Scientific and Industrial Research (Gt. Brit.)

Office of Technical Services

Mecanisme De La Corrosion Des Metaux Dans Des
Fentes Etroites. IV. Corrosion Des Aciers
Inoxydables. (Mechanism of the Corrosion of
Metals in Narrow Fissures. IV. Corrosion of
Stainless Steel), by I. K. Marchakov, I. I.
Rozenfel'd (Rosenfeld), 15 pp.

FRENCH from RUSSIAN, per, zhur fiz khim, Vol
XXXII, 1958, pp 66-72.

Reverse Translation
AEC/CEA-Tr-R609

A Study of the Oxidation of Metals Under the
Conditions of Glow Discharge in Oxygen, by
R. I. Nazarova, 16 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, 1958,
pp 79-85.

AEC 3458

Chem
Sci + Phys

Jan 59

79,561

The Irradiation of the Higher Hydrogen Peroxide
and Peroxon Radicals, by L. A. Rennelsky, et al.
UWOL

ROSSLICH, par, ZEUR FISZ HOM, VOL XXXII, NO 4,
1968, p. 47-52.

POER 1123 REV 1073

150. Od.

Ref. - 1000
Aug. 59

95, 797

The Electrocapillary Behavior of Unsaturated
Alicyclic and Aliphatic Hydrocarbons, by
M. A. Gerovich, G. F. Rybal'chenko.
RUSSIAN, per, Zhur Fiz Khim, Vol 32, No 1,
1958, pp 109-115.

*AEC

The Mechanism of the Electrolytic Oxidation
and Electrolytic Reduction of Some Compounds
on Platinum, by G. A. Martinyuk, A. I.
Shlygin. UNCL

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, No 1,
1958, pp 164-169.

DSIR LLJ RTS 1177

15s. Od. anywhere

Sci - Chem
Oct 59

109 197

Kinetics of the Interaction Between
Gases and the Surface of Metals,
by V. A. Arslambekov.

RUSSIAN, per, Zhurnal Fizicheskoi Khimii,
Vol 32, 1958, pp 170-177
NTC 72-60220-07D

ORIGIN FROM ETS CICUS FILE 01-13775
CCN - ER - R735

July 72

An Apparatus for Measuring Contact Difference of
Potentials by a Condenser Method, by R. Kh. Bursch-
stein, I. A. Larin. UNCLASSIFIED

RUSSIAN, per, Zhurnal Fiz. Khim., SSSR, Vol XXXII,
No 1, 1958, pp 194, 195.

Navy Tr 1789/NRL 675

Sci - Eng

Jul 58

66,388

Oxidizing Processes in Organic Systems Under the
Influence of Ionizing Radiation, by N. A. Bakh,
V. V. Sarayeva, 16 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, 1958, No. 2,
pp 209-218.

Sci - Phys
Dec 58

ABC 3408
ATS/RT-1618
DSIR LLU RTS 1010
78,275

Alkylation of Benzene With Olefines, IV. On the
Mechanism of the Reaction, by N. M. Chirkov, et al.
UNCL

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, No 2, 1958,
pp 219-224.

*DSIR/TCL 115

Sci - Chem
Mar 59

The Electrocapillary Behavior of Unsaturated
Alicyclic and Aliphatic Hydrocarbons, by N. A.
Gerovich and G. F. Rybal'chenko, 6 pp.
RUSSIAN, per, Zhur Fiz. Khim., Vol 32, No 1, 1958,
pp 109-115, P911277567
AMC IB-Tr-64

Sci-Physics
Sept 67

341,519

The Theory of Glass Electrodes, by B. P.
Nikol'skiy, M. M. Shul'ts, N. V. Peschekhonova,
9 pp.

RUSSIAN, per, Zhurnal Fiz Khim, Vol XXXII,
No 2, 1958, pp 252-269. 9098964

NIH 3-55-62

199, 709

Sci - Med

Jun 62

15 434

GF-4

RADUSKEVICH L. V.

Theory of particle precipitation from a gas flow on an isolated cylinder as a function of the filtration process of aerosols

Theorie des Niederschlagens von Teilchen aus der Gasströmung auf einem isolierten Zylinder in Abhängigkeit vom Filtrationsprozess von Aerosolen

Zhur. Fiz. Khim., v. 282-290 (1958)

German

E u r a t o n

Theory of the Separation of a Gaseous Mixture
Under High Pressures, by V. I. Kuz'mich, ~~by~~
I. Z. Fisher. UMCL

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, No 2,
1958, pp 291-297.

DSIR LIB RTS 1038

17s.6d.

Sci - Phys
Sep 59

95, 830

Maxima of Thermodynamic Properties and the Transition of Gas to Liquid in the Supracritical Region,
by M. G. Kaganer, 20 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, 1958,
pp 332-339.

Natl Res Council of Canada
TR-834

Sci - Phys, Chem
Jan 60

105,827

The Effect of the Addition of Organic Solvents on Ion Exchange Equilibrium of Ions of Alkali Metals on Sulpho Resin, by G. M. Panchenkov, et al. UNCL

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, No 2, 1958,
pp 361-368.

*DSIR/TCL 115

Sci - Chem
Mar 59

Baramboym, N. K.

THE KINETICS OF THE MECHANICAL DESTRUCTION OF HIGH POLYMERS. [1960] 13p. 26 refs.
Order from LC or SLA m\$2.40, ph\$3.30 60-16898

Trans. of Zhurnal Fizicheskoy Khimii (USSR) 1958,
v. 32 [no. 2] p. 433-441.

It is shown, that the rate and the limit of mechanical destruction of amorphous polymers depend on their chemical nature. An equation of destruction of amorphous polymers is given. Indicators of destruction degree, giving a many-aided process description, are proposed. (Author)

(Chemistry--Organic, TT, v. 5, no. 3)

60-16898

1. Polymers--Physical factors
2. Polymers--Decomposition
3. Baramboym, N. K.

142,907

Office of Technical Services

Limits of Applicability of the First Order Kinetic
Equation For Isotopic Exchange, by Ya. M. Varshavskiy,
S. E. Vaisberg, 8 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, No 2, 1958,
pp 454-459.

AEC Tr-3679

Sci - Phys

Apr 69

114, 731

Calorimetric Apparatus for Measuring Thermal
Processes Over Long Time Periods, by M. I.
Voskoboinikov, A. P. Kubantsev, 10 pp.
RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, 1958,
pp 460-464. 9220446
AEC-UCRL-Tr-1022(L)

Sci-Electr
Apr 64

253,382

Relationship Between Hydrogen Overvoltage on
Alloys and Their Interatomic Distances, by N. S.
Fedorova. Ural.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, No 3,
1958, pp 505-511.

DSIR LLU RTS 1117

(12s. 6d.)

Sci - Phys
Nov 59

100, 785

Activity on Heterogeneous Catalysts,
II. Semi-conducting Catalysts. by M.
Poltorek.

RUSSIAN, per, Zhur. Fiz. & Khim. Vol. XXXIV
1950, pp 534-542.

CSIRO

Sci - Chem
Div Cl

115, 116

Pal'm, V. A.
AN INVESTIGATION OF THE CHLOROSULPHONATION REACTION. II. KINETICS OF THE CHLORINATION OF p-PHENYLURETHANE SULPHONIC ACID BY CHLOROSULPHONIC ACID (Issledovaniye Reaktsii Khlorosulfirovaniya. II. Kinetika Khlorirovaniya p-Feniluretilansul'firovaniya Khlorosulfonovoy Kislotoy). Jan 61 [14p. 2 refs. RTS 1732]. Order from LC or SLA m\$2.40, ph\$3.30 61-15640

Trans. of Zhurnal Fizicheskoy Khimii (USSR) 1958, v. 32, no. 3, p. 620-627.

The relationship between the absolute value of the acidity function of the medium and the velocity constant for the chlorination of p-phenylurethane sulphonic acid by chlorosulphonic acid has been determined for different temperatures. The variation of the velocity constant with initial concentration of p-phenylurethane sulphonic acid is discussed, and a quantitative theoretical treatment is given. (Author)

(Chemistry--Physical, TT, v. 5, no. 7)

61-15640

1. Sulfonic acids--
Halogenation
2. Chlorosulfonic acid--
Chemical reactions
- I. Pal'm, V. A.
- II. Title: Kinetics...
- III. RTS-1732
- IV. Department of Scientific
and Industrial Research
(Gt. Brit.)

148,763

Office of Technical Services

Theory of the Chromatographic Separation of
Isotopes, by S. E. Bresler.
RUSSIAN, per, Zhurnal Fizicheskoi Khimi,
Vol 32, No 3, 1958, pp 628-634. 9232797
AEC MLM-1333

Sci/Physics
Jun 66

302,551

Theorie de la Separation Chromatographique des Isotopes
(Theory of Chromatographic Separation of Isotopes), by
S. E. Bresler, 12 pp.

RUSSIAN to FRENCH, per, Zhur Fiz Khim, Vol XXXII, 1958,
pp 628-634.

Reverse Trans
CEA Tr-R-1006

Sci
Sep 61

Simultaneous Polarographic Determination of
Oxygen and Hydrogen Peroxide during the Process
of Their Formation under the Action of Radiation,
by V. I. Medvedoskiy, 6 pp.
RUSSIAN, par, Zh. Fiz. Khim., Vol 32, No 4, 1958,
pp 932-934. P91127/967
ABC RPP Tr-16

Sci-MS
Sept 67

341,517

The Dependence of the Potential of a Carbon Reference Electrode on the Oxygen Content of Molten Cryolite, by L. N. Antipin.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, 1958, pp 640-643.

Dept of Interior
TW 857 No 545

215,922

Sci - Min/Met
Oct 62

CTI - 60-30007

The Thermodynamic Properties of Air on
Thermal Ionization and the Shock Waves, by
V. V. Selivanov. UNCL

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII,
No 3, 1958, pp 670-677. 14 9071113

200
DSIR LRU (loan) N.SG6
SLH 60-7071

Sci - Phys
Dec 59

102, 433

Apparatus for Determining Pore Size Distribution,
by R. Kh. Burshtein,

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, No 3,
pp 695-698, 1958,

C.S.I.R.O.

Sci - Chem

May 60

116,407

Isotopic Methods of Study of the Heterogeneity of Active Surfaces and the Interactions in Adsorptive Layer, by S. Z. Roginskiy, 11 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, No 4,
1958, pp 737-745.

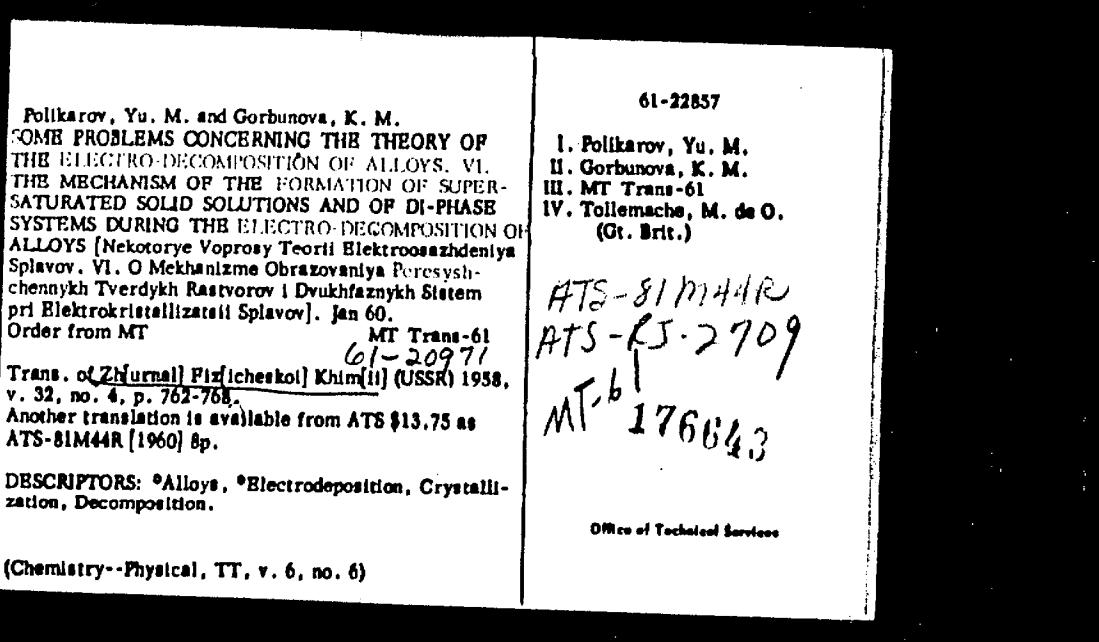
SLA 60-14116

Sci

OTS, Vol III, No 7

133 o 86

Nov 60



The Partial Derivatives of the Fundamental
Thermodynamic Functions in the Terms of Vari-
ables T and P, by M. A. Bazhenov,
S. S. Suttyusheva.

RUSSIAN, per, Zhurnal Fizicheskoy Khimiya,
Vol XXXII, No 4, 1958, pp 778-781.
NASA TT F-11,089

Sci-Math
Aug 67

338,693

The Brightness of Electrolytic Deposits and
Its Relation to the Internal and External
Structure of the Deposit, by K. M. Gorbunova,
A. A. Sutyagina.

RUSSIAN, par, Zhur Fiz Khim, Vol XXXII, No 4,
1958, pp 785-790.

AT&T RJ-2061

Sci - Chem
Dec 59

MT-62 104/058

Oxidation of Ethylene into Ethylene Oxide
Over a Silver Catalyst. I. Experimental Study
of the Reaction Kinetics, by A. I. Kurilenko,
N. V. Mal'kova, et al, 17 p.

RUSSLAN, per, Zhur Fiz Khim, 1958, Vol XXXII,
No 4, pp 797-805.

Sci
Jan 60
Vol 2, No 8

ERCC TR-814

105,575

The Formation of Free Macroradicals on the
Mechanical Breakdown of Polymers, by N. K.
Baranboim. UNCL

RUSSIAN, par, Zhur Fiz Khim, Vol XXXII, No 4,
1958, pp 806-810.

DSIR LLU RTS 1092

(12a. 6d.)

Sci - Chem
Nov 59

100,786

The Reactions of Nitrogen During Explosion,
by A. Ya. Apin, Yu. A. Lebedev, O. I. Nefedova, 12 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, No 4,
1958, pp 819-824.

ATIC F-TS-9932/V
*ABC

Sci - Chem

Aug 59

94, 580

The Connection Between the Texture and Properties of
Electrolytic Nickel Deposits, by G. S. Vozdvizhenskiy
R. S. Sailfullin.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, No 4, 1958,
pp 831-833.

ATS RJ-2060

Sci - Chem
Dec 59

104,067

<p>Myasnikov, I. A. SURFACE PROCESSES ON ZnO AND ITS ELECTRICAL CONDUCTIVITY IN A HYDROGEN ATMOSPHERE [Poverkhnostnye Prosesy na ZnO i yeye Elektropervodnost' v Atmosfere Vodoroda]. [1960] 8p. Order from ATS \$10.65 ATS-77N48R Trans. of Zhur[nal] Fiz[icheskoy] Khim[iii] (USSR) 1958, v. 32, no. 4, p. 841-847.</p> <p style="text-align: center;">151564</p> <p>(Physics--Solid State, TT, v. 5, no. 8)</p>	<p>61-12782</p> <p>1. Zinc oxides--Electrical properties 2. Electrical conductance--Measurement I. Myasnikov, I. A. II. ATS-77N48R III. Associated Technical Services, Inc., East Orange, N. J.</p> <p>ATS/RJ-3041</p> <p>Office of Technical Services</p>
--	--

Kinetics of the Vapor Phase Hydration of
Acetylene in the Presence of a Carbon Supported
Phosphoric Acid Catalyst, by E. N. Taybina,
A. I. Gel'behteyn, et al, 9 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, No 4,
1958, pp 856-863.

SLA 60-14115

Sci

OTS, Vol III, No 7

133,088

Nov 60

(DC-3518).

Isotopic Oxygen Exchange Between Water and Carbon Dioxide, by M. Ya. Kato, F. S. Lapteva, 8 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, No 4,
1958, pp 864-868.

3-A 60-31171
JPRS 3272

Sci - Phys, Chem
May 60

117,420

S-74/60

(227-5553)

The Concentration of the Heavy Isotopes of Carbon
by a Chemical Method, by Yu. K. Shaposhnikov,
11 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, No 4,
1958, pp 869-874.

JPRS 2528

Sci - Chem

123,403

Aug 60

A Study of Iron-Chromium Catalysts in Dehydrogenation and Dehydration Reactions of Isopropyl Alcohol, by A. A. Balandin, et al.

RUSSIAN, per, Zhur Fiz Khim Vol XXXII, No 4,
1958, pp 882-893.

ATS RJ-1890

Sci - Chem

Jan 60

105 406

The Application of Autoradiography to the
Investigation of Cathodic Metal Deposits,
by S. N. Kochergin, G. R. Pobedimskiy,
A. V. Leont'yev, 4 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, No 4,
1958, pp 930-931.

CEA P-1536 Rev T
SLA 60-18123

Sci

195, 981

Vol 4, No 10
Sci

Simultaneous Polarographic Determination of
Oxygen and Hydrogen Peroxide During the Progress
of Their Formation Under the Action of Radiation,
by V. Medvedovskii.

RUSSIAN, per, Zhurnal Fizicheskoi Khimii, Vol 32,
1958, pp 932-934.
NTC-71-12489-07E

Nov 71

15 433

GF-4

DAVTYAN O. K.

Development of a new method of discovering leaks (outflows)
in vacuum systems and high-pressure equipment

Ausarbeitung einer neuen Methode zur Entdeckung von Undichtigkeiten
(Ausflüssen) in Vakuumsystemen und in Hochdruckapparaturen

Zhur. Fiz. Khim., 32, 935-936 (1958)

German

E u r a t o m

Photoreduction Mechanism of Chlorophyll and Its
Sensitizing Effect, by V. B. Yevstigneyev, 15 p.

RUSSIAN, per, Zhur Fiz Khim, 1958, Vol XXXII,
No 5, pp 969-980.

SLA 59-17412

Sci
Feb 60
Vol 2, No 9

107058

An Optical Investigation of the Molecular Structure of Derivatives of Sym-Triazine. II. The Ultraviolet Absorption Spectra, Molecular Structure, and Analysis of Ammeline and Ammalide, by N. I. Malkina, A. I. Finkel'shtein,

RUSSIAN, per, Zhur Pis Khim, Vol XXXII, No 5,
1958, pp 981-985.

Assoc Tech Serv RJ-1434

85, 313

Sci - Chem
Apr 59

Polukarov, Yu. M.
INVESTIGATION OF THE STRUCTURE AND MAGNETIC CHARACTERISTICS OF ELECTRODEPOSITED PERROMAGNETIC METALS AND ALLOYS. I.
NICKEL. [1960] 19p. 27 refs.
Order from LC or SLA m\$2.40, ph\$3.30 61-10122

Trans. of Zhurnal Pizichenko Khimii (USSR) 1958,
v. 32, no. 5, p. 1008-1015.
Other translations are available from ATS \$10.65 as
ATS-14M42R [1960] 9p. and from LC or SLA m\$2.40,
ph\$3.30 as 59-17256 [1959] 13p.

Experiments are described which showed that, due to the increase in stresses and strains of expansion in coatings, the coercive force of electrolytic nickel deposits increases when the pH of the electrolyte is increased. Under conditions where the pH considerably exceeds the value corresponding to the limit of the formation of the hydrate in the solution, a change is possible in the character of crystallization of the (Chemistry-Physical, TT, v. 3, no. 4) (over)

61-10122

1. Nickel--Electrodeposition
2. Nickel--Magnetic properties
1. Polukarov, Yu. M.
- II. Title: Nickel

143/222

NLL M.24.26
ATS-14M42R
ATO-RJ-2604

Office of Technical Services

Oxidation of Ethylene to Ethylene Oxide on a
Silver Catalyst, by A. I. Kurilenko, et al.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, No 5,
1958, pp 1043-1048.

AT&T RJ-1614

Sci - Chem
Jul 59

Effect of the Nature of the Gas Medium on the
Mechanical Destruction of Polymers, by N. K.
Baranboim.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, No 5,
1958, pp 1049-1054.

ATS RJ-1853
SLA 59-20290

Sci - Chem

Jan 60

105,061

Heats of Atomic and Molecular Chemisorption of
Hydrogen on Nickel, Iron, Chromium and Platinum,
by N. N. Kvantaradze,

RUSSIAN, por, Zhur Fiz Khim, Vol XXXII, No 5, 1958,
pp 1055-1058.

ATS RJ-2170

Sci - Chem

May 60

115,446

A Spectroscopic Study of the Turbulent Flame by
V. Ya. Baserich, 5 pp.

RUSSIAN, per, Zhurnal Fiz Khim, Vol XXXII, May
1958, pp 1077-1080.

8

ACSI H-2479 A

Sci - Physics

May 60

115,619

A Method for Confirming and Predicting Data
Concerning Phase Equilibria in Multicomponent
Systems, by V. B. Kogan, 11 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, No 5,
1958, pp 1095-1102.

SLA 60-17730

Sci

CITATION INDEX 129,402

OTS, Vol IV, No 3

Sep 60

Influence of the Electrophysical Properties
of Germanium on Its Anodic Dissolution
Process, by E. A. Efimov, I. G. Gruselim-
chuk, 8 pp.

RUBSLAN, per, Zhur Fiz Khim, 1958, Vol XXXII,
No 5, pp 1103-1106.

SLA 59-14306

OTS

Sci - Phys
OTS I, 12
Jul 59

92, 336

An Experimental Study of the Stability of Open
Laminar Diffusion Flames, by A. I. Maklakov,
[REDACTED] 13 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, May 1958,
pp 1107-1115.

ACSI H-2479 B

Sci - Chem

May 60

115,621

An Investigation into the Critical Conditions of Gaseous Ozone Ignition, by S. A. Kamenetskaya, S. Ya. Pshezhetskiy, 11 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, May 1958,
pp 1122-1130.

ACSI B-2479 C

Sci - Chem

May 60

115,620

A Method for Determining the Total and Partial Saturated Vapor Pressures of Liquid Binary Mixtures Over the Range 0.1 -10 mm Hg, by S. I. Sklyarevsk, Yu. U. Samson, 9 pp.

RUSSIAN, per, Zhur Fis Khim, Vol XXXII, 1958,
pp 1149-1152.

AEC 3411

Sci - Phys
Dec 58

78, 268

A Method for Cryoscopic Measurements, by T. N.
Sumanrokova, G. I. Arsenov.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, No 5,
1958, pp 1153-1154.

ATS RJ-1680

Sci - Chem

Jul 59

90, 854

(2237-1)

Methods of Measuring the Size of Monodisperse Fog
Particles With a Radius of 0.1-0.5 Microns,
by Ye. N. Gladkova, G. L. Matanov, 5 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, No 5, 1958,
pp 1160-1162.

JPAS L-648-¹NY

Sci - Chem
Mar 59

82,400

Linear Conformities Between Different
Physicochemical Properties of Hydrocarbons,
by V. M. Tatevskii,

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, No 5,
pp 1168-1170, 1958,

C.S.I.R.O.

Sci - Chem

May 60

116,409

Thermodynamic Decomposition of Glycoldinitrite, by
B. N. Kondrikov, 3 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, 1958,
pp 1175-1176. 9097029

AEC UCRL Tr-525(L)

Sci - Phys, Chem
Apr 62

189, 959

(NY 5023)

Analytical Solution of the Problem of Thermal
Explosion for the Cylindrical Case, by
D. A. Frank-Kamenetskiy, 6 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, No 5,
1958, pp 1182, 1183.

JPRS 5869

Sci - Phys

Oct 60

129,603

K. V. Chmutov, Resolution of the All-Union
Conference on Chromatography, Moscow, 3-6 Feb 58,
Zhurnal Fizicheskoy Khimii, Vol 32, No 5, May 58,
pp 1184-1185.

SIR No 13 (3)

X-Ray Structural Investigation of Galvanic
Nickel-Iron Alloys, by N. S. Fedorova,
6 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII,
No 6, 1958, pp 1211-1213.

SLA 60-17789

Sci
Vol IV, No 5
Mar 62

The Hydrogen Adsorption Properties of Metals as a Function of Their Position in the Mendeleev Periodic System of Elements, by E. N. Kortaradze,
8 pp.

RUSSIAN, per, Zbir Fiz Khim, Vol XXXII, 1958,
pp 1214-1217.

X-6
AEC/SCL-T-234

Sci - Phys

To be processed and filed in
(CSIRO)

May 59

86,973

A Method For the Quantitative Determination of
Cyclohexanone and Cyclohexanol in the Oxidation
Products of Cyclohexane by Infrared Absorption
Spectra, by I. V. Berezin.
RUSSIAN, per, Zh Fiz Khim, Vol 32, No 6,
1958, pp 1218-1225.
ATS-4751

Sci
Dec 68

368,687

The Isopiestic Method for Determining the Mean
Molecular Weight, by S. A. Pavlova, I. I.
Tverdokhlebova.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, No 6,
1958, pp 1313-1318.

NIL M. 2612
SLA 61-3327/
173, 877

Sci - Chem

Nov 61

Studies of the Cathodic Process During
Electrolysis of the Pure Molten Chlorides of
Calcium, Sodium and Potassium, by L. Suski, 28 pp.

RUSSIAN, par, Zhur Fiz Khim, Vol XXXII, 1928,
pp 1393-1403.

AEC Tr 3667

Sci - Chem

Jun 59

90,070

Methods and Equipment for Physical-Chemical Research, Porometer for Low Pressure (Low Pressure Porometer), by M. M. Dubinin,

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, No 6,
pp 1404-1406, 1958

C.S.I.R.O.

Sci - Chem

May 60

116,408

The Determination of Diffusion Coefficients in
Fused Oxides, by Yu. P. Nikitin, et al.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, No 6,
1958, p 1420.

ATS RJ-2049

Sci - Chem
Dec 59

104,056

Investigation of the Kinetics of Ozone Cracking of
Vulcanised Rubbers, by Yu. S. Zuyev, S. I. Pravodnikova.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, No 7, 1958,
pp 1457-1464.

CSIRO

118,563

Sci - Chem

Jun 60

Influence of the Capacity of Sulphotyzenate Cations on Ion-Exchange Equilibrium, by E. P. Chernova, et al. UNCL

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, 1958, pp 1423-1434.

Chem. - Chem.

DSIR LIB M. 964

(loan)

Sci - Chem
Feb 60

108,411

Solubility of Gases in Cyclohexane, by D. S.
Tsiklis, G. M. Svetlova, 12 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, No 7,
1958, pp 1476-1480.

SIA 59-10410

Sci - Med
Vol 2, No 1

97, 292

Electrochemical Reaction Mechanism on the Mercury Cathode in Uranium Salt Solutions, by G. S. Tyurikov, et al.

RUSSIAN, per, Zhur Fiz Khim, Vol XXII, 1958,
pp 1490-1498.

*AEC

Sci -Phys, Chem
Jul 62

Isotopic Oxygen Exchange in Acid and Salt Solutions and
its Mechanism, by A. I. Bordsiky, N. A. Vysotskaya.
RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, No 7, 1958,
pp 1521-1531.
Dept of Navy Tr 4300/APL T-1463

Sci - Chem
Nov 65

292,742

On the Light Scattering Method of Investigating the
Polydispersity of Polymers, by B. B. Eskin, N. G.
Chunova, 7 pp.

RUBELIAN, por, Khar Pis Khin, Vol XXXIX, 1958, pp
1532-1535.

AEC Tr 3601.

Sci - Phys

Apr 59

85,742

Kontetskiy, Ya. and Levich, V. G.
THE APPLICATION OF THE ROTATING DISK ELECTRODE TO THE STUDY OF KINETIC AND CATALYTIC PROCESSES IN ELECTROCHEMISTRY. [1954] 21 p. \$ refs.
Order from LC or SLA m\$2.70, pl\$4.80 60-18784

Trans. of "Zhurnal Fizicheskoy Khimii (USSR)" 1958, v. 32, no. 7, p. 1565-1575.

The disk electrode has more merits than the dropping mercury electrode as an instrument for studying electrode reactions complicated by volume reactions. The limiting diffusion currents on the surface of a disk electrode have been calculated for typical cases of kinetic and catalytic processes. On these examples a general procedure has been demonstrated for calculating such reactions. (Author)

(Chemistry--Physical, TT, v. 5, no. 2)

60-18784

1. Electrochemistry--Instrumentation
2. Electrodes--Applications
3. Title: Rotating disk

I. Kontetskiy, Ya.
II. Levich, V. G.

142-1772

Office of Technical Services

14 329

Fr-2

ZUBOVA E. V., KARATAEVA L. A.

Chemical transformations in the solid state at pressures of
50,000 kg/cm² and a shearing stress

Transformations chimiques se produisant en phase solide sous
l'action simultanée d'une pression de 50.000 kg/cm² et d'un
cisailement

Zhur. Fiz. Khim., 32, No. 7, 1576-1579 (1958)

F/R-580 - French

Abs.: NSA, 13, No. 1, ref. 102 (1959) - English

E u r a t o m

A Study of the Thermodynamic Properties of Binary
Iron-Manganese System in the Solid State, by
A. P. Lyubimov, A. A. Granovskaya, L. Ye.
Berenshteyn, 10 p.

RUSSIAN, per, Zhur Fiz Khimi, 1958, Vol XXXII,
No 7, pp 1591-1596.

SLA 60-10369

Sci
Apr 60
Vol III, No 3

112,042

Certain Laws of Photochemical Ozone Decomposition
in the Liquid Phase, by A. V. Pankratov,
S. Ya. Pshezhetskiy.

RUSSIAN, per, Zhur Fizicheskoy Khimii,
Vol XXXII, No 7, 1958, pp 1605-1611.
*NASA TT F-10, 388

Sci-Phys
Nov 66

Makarov, L. L., Evtrop'ev, K. K., and Vlasov, Yu. G.
THE OSMOTIC AND ACTIVITY COEFFICIENTS OF RbCl, CsCl AND KI IN HIGHLY CONCENTRATED AQUEOUS SOLUTIONS (Osmoticheskie Koefitsienty i Koeffitsinty Aktivnosti RbCl, CsCl i KI v Vodnykh Rastvorakh pri Vysokikh Koncentratsiyakh) tr. by Ivan Mittin. 1962 [10p. 5 refs. Order from OTS, SLA, or ETC \$1.10 TT-63-1959]

Trans. of *Zhurnal Fizicheskoi Khimii* (USSR) 1958, v. 32, no. 7, p. 1618-1621. (Abstract available)

DESCRIPTORS: *Electroosmosis, Osmosis, *Electrolytes, *Chlorides, *Rubidium compounds, *Cesium compounds, *Potassium compounds, Thermodynamics, Solubility, Solutions, Equations,

(Chemistry--Physical, TT, v. II, no. 2) (over)

TT-63-19591

I. Makarov, L. L.
II. Evtrop'ev, K. K.
III. Vlasov, Yu. G.
IV. Geological Survey,
Denver, Colo.

Office of Technical Services

Effect of Surface-Active Substances on the Diffusion
Rate of Electrolytic Hydrogen Through Iron, by
A. I. Osho, 12 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXII, No 7, 1958,
pp 1622-1631. 9095541

AEC Tr-4856

Sci - Phys, Chem
Mar 62

186,496

Phase and Volume Relationships in Liquid-Gas Systems
at High Pressures. Part 6. The Cyclohexane-Hydrogen
System, by I. R. Krichevskiy.
RUSSIAN, per, Zh Fiz Khim., Vol 32, No 9, 1958,
pp 2080-2086.
ATS-RJ-5837

Apr 72

Dobychin, D. P.

THE DIFFUSION OF WATER VAPOR AND THE
FLOW OF AIR THROUGH POROUS GLASS
(Diffuziya Vodyanykh Parov i Tepchene Vozdukha v
Poristom Stekle). [1963] [12p] (foreign text included)

9refs

Order from OTS, SLA, or ETC \$1.60 TT-64-10573

Trans. of #Zhurnal Prikladnoi Khimii (USSR) 1959,
v. 32, no. 10, p. 2336-2339.

A trans. is available in French from OTS or SLA
\$1.10 as TT-62-25075, CEA-tr-R-581, 24 Mar 62[9p].

DESCRIPTORS: *Porous materials, *Glass, Water
vapor, Diffusion, *Gas flow, Sorption, Catalysis.

TT-64-10573

I. Dobychin, D. P.

(Chemistry--Physical, TT, v. 11, no. 5)

Office of Technical Services

Kinetics and Mechanism of Hydrocarbon Decomposition. XIII. Kinetics of the Propylene Inhibited Cracking of Butane, by A. D. Stepanovich, B. I. Birger, 15 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXIII, No 1, 1959,
pp 8-14.

REF ID: A6372
NRCC TR-888

Sci - Chemistry
Jan 61

136,396

On Liquid Diffusion Electrodes. The Initial
Slope of Polarization Curves, by I. A.
Zaydenmzn, R. M. Perakaya, 9 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXIII,
No 1, 1959, pp 50-57.

Sci - Phys

Jun 60

RUSSIAN & FRENCH
OTS TT-62-28801

ACSI H-6379
SLA TT-60-165940160-21779
118,687

S-322/65

(NY-3919)

Studies of the Thermodynamic Properties of
Compounds by the Method of Explosion in a
Spherical Bomb, by V. A. Medvedev, et al., 1st ed.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXIII, No 1,
1959, pp 50-64.

SPRS 6089

Sci - Chem

Aug 60

121,628

Skryabin, A. K.
THE PROCESS OF EXTRACTION. [1960] 8p. 1 ref.
Order from RIS \$9.00
RIS U-126

Trans. of Zhurnal Fizicheskoy Khimii (USSR) 1959,
v. 33, no. 1, p. 74-77.

143,074

61-12052

- I. Solvent extraction--
Mathematical analysis
- II. Skryabin, A. K.
- III. Research Information
Service, New York

Office of Technical Services

(Chemistry--Physical, TT, v. 5, no. 1)

The Crystalline State of Polymers. I. The Crystallization of Polymers in the Process of Polymerization,
by D. D. Chegodayev,

RUSSIAN, per, Zhur Fiz Khim, Vol XXXIII, No 1, 1959,
pp 96-99.

ATS RJ-2119

Sci - Chem

May 60

115406

<p>Tedoradze, G. A. KINETICS OF THE OXIDATION OF CHLORIDE IONS ON PLATINUM (Kinetika Okisljeniya Ionov Klorata na Platine). Apr 61 [16]p. 20 refs. RTS 1795. Order from OTS or SLA \$1.40 61-19693</p> <p>Trans. of Zhurnal Fizicheskoy Khimii (USSR) 1959, v. 33, no. 1, p. 129-136.</p> <p>DESCRIPTORS: *Chlorides, *Ions, *Platinum, *Oxida- tion; Chemical reactions, Anodes (Electrolytic cell), *Electrolysis, Electrochemistry.</p> <p>(Chemistry--Physical, TT, v. 6, no. 1)</p>	<p>61-19693</p> <p>I. Tedoradze, G. A. II. RTS-1795 III. Department of Scientific and Industrial Research (Q. Brit.)</p> <p>16181.</p>	
--	--	--

Delimarskii, Yu.K., and Gorodyskii, A.V.
AU SUJET DE LA TENSION DE DECOMPOSITION DES
ELECTROLYTES (Decomposition Potentials of
Electrolytes), 10p, 12refs, CNRS-VIII 512.
Order from OTS, ETC or CNRS \$0.80 TT-62-26748

Trans. in French of Zhurnal Fizicheskoi Khimii
(USSR) 1959, v.33, no.1, p.137-140.

DESCRIPTORS: *Electrolytes, *Electric potential,
Decomposition, Electric currents.

(Chemistry--Physical, TT, v. 11, no. 7)

TT-62-26748

I. Delimarskii, Yu.K.
II. Gorodyskii, A.V.
III. CNRS-VIII 512
IV. Centre National de la Recherche Scientifique, Paris

Office of Technical Services
European Translations Centre

Statistics of Adsorbed Particles in the
Electronic Theory of Chemisorption, by Sh.
M. Kogan,

RUSSIAN, per, Zhur Fiz Khim, Vol XXXIII, 1959,
pp 156-160.

AEC Tr-4298
AT&T-3028

Sci - Phys
24 Feb 61

141,070

Oscillographic Investigations of the Kinetics
of the Electrode Processes on Metallic
Electrodes, by V. J. Kravtsov, 18 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXIII,
No 1, 1959, pp 165-173.

OPS 60-16595

Sci
Mar 62
Vol 4, No 4

187, 259

Influence of Boron Fluoride on the Catalytic
Activity of Aluminum Oxide and Alumosilicates, by
T. V. Antipina, E. N. Avdonyna,

RUSSIAN, per, Zhur Fiz Khim, Vol XXXIII, No 1,
pp 192-196. 1959.

C.S.I.R.O.

Sci

May 60

116,095

The Influence of Surface Active Substances on the
Motion of Gas Bubbles in Hydrocarbon Liquids, by
A. Yu. Koshevnik, et al.

RUSSIAN, per, Zhur Fiz Khim, Vol XXXIII, No 1, 1959,
pp 197-203.

ATS RJ-1964

Sci - Chem

105 757

Jan 60